AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 10, 13-20, 29, 30, 33, 35, and 41, and add new claim 42 as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): An interferometric system, comprising: ~~a coherent light source module for generating~~

a reference object;

a test object;

at least two spatially separated light sources that generate mutually orthogonally polarized beams of light, wherein the mutually orthogonally polarized beams of light [[which]] are spatially displaced with respect to each other as they are provided to ~~and are in phase with one another, from spatially separated sources; an interferometry module for receiving said mutually orthogonally polarized beams, which are spatially displaced with respect to each other and are in phase with one another, from said source module, and having~~ at least [[a]]the reference object and [[a]]the test object for interaction with said beams; and

a simultaneous phase shifting module ~~for receiving~~that receives at least a portion of said beams ~~from said interferometry module~~after said beams have interacted with said reference object and said test object and ~~generating~~generates at least two phase-shifted interferograms substantially simultaneously from said beams.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

Claim 2 (cancelled).

Claim 3 (previously presented): An interferometric system of claim 1, wherein said portion of said beams comprises mutually orthogonally polarized reference and test beams.

Claim 4 (previously presented): An interferometric system of claim 3, wherein said reference beam emanates from one of said spatially separated sources and said test beam emanates from another of said spatially separated sources.

Claim 5 (original): An interferometric system of claim 3, wherein said reference and test beams received by said simultaneous phase shifting module substantially overlap each other.

Claim 6 (original): An interferometric system of claim 1, wherein the mutually orthogonally polarized beams are coherent.

Claim 7 (previously presented): An interferometric system of claim 1, wherein there are two of said spatially separated sources.

Claim 8 (original): An interferometric system of claim 1, further comprising an alignment module.

Claim 9 (original): An interferometric system of claim 1, further comprising an imaging module.

Claim 10 (currently amended): An interferometric system of claim 1, wherein the ~~source module includes~~at least two spatially separated light sources are comprised of a linearly polarized light source and a polarization beamsplitter configured to split linearly polarized light into said two mutually orthogonally polarized beams.

Claim 11 (original): An interferometric system of claim 1, wherein said sources are virtual.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
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Claim 12 (original): An interferometric system of claim 1, wherein said sources are real.

Claim 13 (currently amended): An interferometric system of claim 1, ~~wherein the interferometry module further includes~~further comprising a nonpolarizing beamsplitter.

Claim 14 (currently amended): An interferometric system of claim 13, wherein the nonpolarizing beamsplitter is positioned substantially between the ~~source module~~light sources and the reference object.

Claim 15 (currently amended): An interferometric system of claim 1, wherein the interferometry module further includes a quarter waveplate positioned between the ~~source module~~light sources and the reference object.

Claim 16 (currently amended): An interferometric system of claim 15, wherein the quarter waveplate is positioned substantially between [[the]]a nonpolarizing beamsplitter and a collimator.

Claim 17 (currently amended): An interferometric system of claim 1, wherein the ~~interferometry module~~interferometric system is of a Fizeau configuration.

Claim 18 (currently amended): An interferometric system of claim 8, wherein the alignment module is positioned to intercept the beams between the ~~interferometry module~~test object and the simultaneous phase-shifting module.

Claim 19 (currently amended): An interferometric system of claim 9, wherein the imaging module is positioned to intercept the beams between the ~~interferometry module~~test object and the simultaneous phase shifting module.

Claim 20 (currently amended): An interferometric system of claim 1, wherein the ~~source module includes~~at least two spatially separated light sources are comprised of a

HAYES SOLOWAY P.C.
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FAX. 520.882.7643

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polarization beamsplitter configured to interact with a beam from a source to provide said mutually orthogonally polarized beams.

Claim 21 (original): An interferometric system of claim 20, wherein said polarization beamsplitter comprises a prism.

Claim 22 (previously presented): An interferometric system of claim 20, wherein said polarization beamsplitter comprises a calcite beam displacer.

Claim 23 (original): An interferometric system of claim 20, wherein said polarization beamsplitter comprises two calcite beam displacers and a half waveplate.

Claim 24 (previously presented): An interferometric system of claim 20, wherein the polarization beamsplitter comprises two fiber optics and a cube polarizing beamsplitter.

Claim 25 (previously presented): An interferometric system of claim 20, wherein the polarization beamsplitter comprises a polarizing lateral displacement beamsplitter.

Claim 26 (original): An interferometric system of claim 20, wherein the polarization beamsplitter comprises a cube polarizing beamsplitter and mirror.

Claim 27 (original): An interferometrie system of claim 1, further comprising a filter to block said other portion of the beams from entering the simultaneous phase shifting module.

Claim 28 (original): An interferometric system of claim 27, wherein said filter is configured with an aperture to permit passage of said portion of the beams received by the simultaneous phase shifting module.

Claim 29 (currently amended): An interferometric system, comprising: ~~a coherent light source module having~~

a reference object;

a test object;

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE, SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

a source of polarized light and a polarization beamsplitter ~~for acting on said polarized light to generate~~that generates mutually orthogonally polarized beams of light, which are spatially displaced with respect to each other as they are provided to ~~and are in phase with one another, emanating from spatially separate source points; an interferometry module for receiving said orthogonally polarized beams, which are spatially displaced with respect to each other and are in phase with one another, from said source, having optical elements,~~ at least the [[a]] reference object and [[a]]the test object, wherein said beams follow a substantially common pathway;~~where said optical elements are configured to define a substantially common pathway for said beams, said interferometry module further comprising~~

means for overlapping a test beam and a reference beam; and

a phase shifting module for receiving at least a portion of said beams ~~from said interferometry module~~after said beams have interacted with the reference object and the test object to generate at least two phase-shifted interferograms substantially simultaneously from said test and reference beams.

Claim 30 (currently amended): An interferometric system of claim 29, wherein said polarized light from said source ~~module~~ is linearly polarized.

Claim 31 (original): An interferometric system of claim 29, further comprising means for viewing said test and reference beams.

Claim 32 (original): An interferometric system of claim 29, further comprising means for selecting said test and reference beams.

Claim 33 (currently amended): An interferometric system, comprising: ~~a coherent light source module having~~

a reference object;

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

a test object;

a source of linearly polarized light, and a polarization beamsplitter ~~for generating~~that generates mutually orthogonally polarized wavefronts, ~~which~~ are spatially displaced with respect to each other as they are provided to ~~and are in phase with one another, as emanating from two spatially separated sources; an interferometry module for receiving said orthogonally polarized wavefronts, which are spatially displaced with respect to each other and are in phase with one another, said interferometry module having~~ [[a]]said test object and [[a]]said reference object and wherein orthogonally polarized reference wavefronts and orthogonally polarized test wavefronts are reflected from said reference object and said test object, respectively;[[,]]

a beam splitter and a collimator~~, wherein orthogonally polarized reference wavefronts and orthogonally polarized test wavefronts exit the interferometry~~;

means for overlapping one of said orthogonally polarized reference wavefront with one of said orthogonally polarized test wavefronts; and

a simultaneous phase shifting module ~~for receiving~~that receives said overlapping one reference wavefront and said one test wavefront ~~from said interferometry module for generating~~and generates at least two phase-shifted interferograms substantially simultaneously.

Claim 34 (cancelled)

Claim 35 (currently amended): An interferometric system of claim 1, wherein a variable phase retarder is inserted between said ~~source module~~light sources and said ~~interferometry module~~reference object.

Claim 36 (withdrawn): An interferometric system, comprising: a source module having a source of polarized light and a polarization beamsplitter configured to act on said polarized light to generate mutually orthogonally polarized beams of light; an interferometry

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE, SUITE 140
TUCSON, AZ 85718
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FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

module receiving said orthogonally polarized beams from said source, having optical elements, a reference object and a test object, said interferometry module further comprising a mechanism for manipulating a test beam and a reference beam into an overlapping position; a phase shifting module receiving a portion of said beams from said interferometry module to generate at least two phase-shifted interferograms substantially simultaneously from said test and reference beams, and an alignment camera which provides a view of relative positioning of the wavelengths and degree of overlap between them.

Claim 37 (withdrawn): An interferometric system of claim 36, wherein said polarized light from said source module is linearly polarized.

Claim 38 (withdrawn): An interferometric system of claim 36, wherein the mechanism for manipulating comprises a tip-tilt mechanism.

Claim 39 (withdrawn): An interferometric system, comprising: a source module having a source of linearly polarized light, and a polarization beamsplitter configured to generate mutually orthogonally polarized wavefronts as emanating from two spatially separated sources; an interferometry module receiving said orthogonally polarized wavefronts, said interferometry module having a test object and a reference, a beam splitter and a collimator, wherein orthogonally polarized reference wavefronts and orthogonally polarized test wavefronts exit the interferometry module; a tip-tilt mechanism for overlapping one of said orthogonally polarized reference wavefront with one of said orthogonally polarized test wavefronts; a simultaneous phase shifting module receiving said overlapping one reference wavefront and said one test wavefront from said interferometry module for generating at least two phase-shifted interferograms substantially simultaneously, wherein said wavefronts follow a substantially common path through said interferometric system.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
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FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

Claim 40 (previously presented): An interferometric system of claim 1,

wherein said beams follow a substantially common path through said interferometric system.

Claim 41 (currently amended): An interferometric system comprising:

a Fizeau interferometer comprising a source of two polarized beams having polarization rotated with respect to each other and emanating from spatially separate origins, wherein the two polarized beams are spatially displaced with respect to each other as they are provided to a reference object and a test object.

Claim 42 (new): An interferometric system of claim 1, wherein at least one of said sources is virtual.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567